

# What do stakeholders want in relation to the control of production diseases?

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#### Stakeholder perceptions

- Stakeholders in 5 EU countries, across the pig, broiler and layer industries were consulted
- The associated physical yield and cost changes were also assessed

 No significant different results were found across countries or between different stakeholders

More proactive interventions were preferred



#### Why public perceptions matter

- The sustainability of a production systems also includes how acceptable they are to stakeholders, including the public
- The public are becoming more concerned about how the food they eat is produced
- However, they are also becoming less familiar with modern food production
- A greater understanding of societal expectations can lead to greater trust





## Systematic reviews

- Two separate systematic reviews were conducted:
  - Willingness-to-pay (WTP) meta-analysis (n=54)
  - Attitudes narrative review (n=80)
- Protocols were published online prior to reviews commencing
- Four databases were searched for each review using a combination of pre-specified key words
- Results were screened in a two stage process



#### Meta-analysis results

- A research gap was identified in relation to interventions to address production diseases
- A small, positive WTP premium was found for higher welfare products. This varied by subgroup;
  - Western and Southern Europe had a higher WTP than Northern Europe and the UK
  - Highest for beef cattle, dairy cattle and layer hens and lowest for pigs
  - Consumers had a higher WTP than citizens (Both were positive)



#### Meta-analysis results continued

- Socio-demographic characteristics explain the most variability in the data, although heterogeneity remains high at over 80%
  - WTP for FAW appears to decrease with age
  - Results suggest that women are likely to pay more than men
  - Those with a higher income and higher education are also WTP more





#### Thematic analysis results

- Again a research gap was identified in relation to attitudes towards production diseases
- Consumers mostly view modern production systems negatively and voice a number of concerns
  - -Naturalness and humane treatment were central to this
- The majority of concerns were also motivated by human health
  - -e.g. the use of antibiotics was associated with food safety
- Sociodemographic characteristics were again important

## Thematic analysis results



- Consumers have a number of coping mechanisms to enable them to eat meat
  - A number of barriers to purchasing higher welfare products were identified
- Consumers associated higher welfare/ animal friendly products with improved product quality, safety and healthiness
- Both reviews indicate support for the use of legislative and market based solutions for improving farm animal welfare



## **European Consumer Survey**

- 2,330 responses were collected across the 5 countries and 3 survey versions
- Questions were asked in relation to a range of topics
- Descriptive statistics were obtained and Kruskal-Wallis ANOVA used to establish cross-country differences
- Exploratory factor analysis and structural equation modelling was used to explore the relationship between latent variables



#### Conclusions

- The public have very little knowledge about modern production systems
  - Including where the products they eat come from

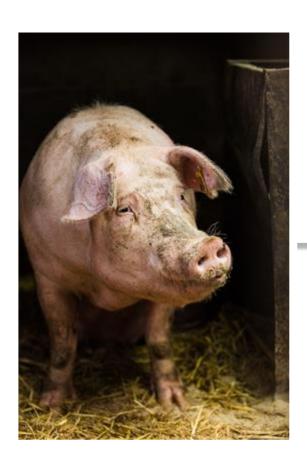
- Natural and proactive interventions are preferred
  - E.g. biosecurity measures, and changes to housing design and stocking density.

#### Conclusions



- The public have very little knowledge about modern production systems
- Stakeholders need to be more proactive in terms of the information they are providing to the public.
  - This may help with miscommunication and increased trust
- Case studies/ practice changes that would create public good will should be identified and communicated
- Independent assurance is important and stakeholders should be identified who could carry out this role.
  - Greater communication of existing relationships





## Thank you!

Any questions?









#### Further reading

- Clark, B., Stewart, G.B., Panzone, L.A., Kyriazakis, I. and Frewer, L.J. (2017). Citizens, consumers and farm animal welfare: A meta-analysis of willingness-to-pay studies. *Food Policy*, 5, 68, pp.112-127.
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- Clark, B., Stewart, G.B., Panzone, L.A. & Frewer, L.J. (2014a). A protocol for a systematic review into consumers' attitudes, beliefs and perceived ethical obligations towards farm animal welfare. *PeerJ PrePrints* 2:e676v1
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- Clark, B., Stewart, G.S., Panzone, L.A. & Frewer, L.J. (2014b). A protocol for a meta-analysis of consumers' and citizens willingness-to-pay for farm animal welfare and disease prevention. *PeerJ PrePrints* 2:e675v1 <a href="http://dx.doi.org/10.7287/peerj.preprints.675v1">http://dx.doi.org/10.7287/peerj.preprints.675v1</a>